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US	08/833,457 (CON)
Filed on	1 April 1997 (01.04.97)
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(54) Title: IDENTIFICATION OF POLYNUCLEOTIDES ENCODING NOVEL *HELICOBACTER* POLYPEPTIDES IN THE *HELICOBACTER* GENOME

(57) Abstract

The invention provides *Helicobacter* polypeptides that can be used in vaccination methods for preventing or treating *Helicobacter* infection, and polynucleotides that encode these polypeptides. The invention also provides diagnostic methods employing these polypeptides.

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CC   complexity of the parasitic lifecycle, and provide new targets for
CC   vaccine and drug development. Parasite resistance to drugs and mosquito
CC   resistance to insecticides have led to a resurgence of malaria in many
CC   parts of the world, and there is a pressing need for vaccines and new
CC   drugs. AAA70078 to AAA70287 and AAB18144 to AAB18352 represent nucleotide
CC   and protein sequences given in the present invention, but which are not
CC   specifically mentioned within the specification.
XX
SQ   Sequence   1245 AA;

  Query Match             13.2%;  Score 69;  DB 21;  Length 1245;
  Best Local Similarity   27.8%;  Pred. No. 16;
  Matches   25;  Conservative   12;  Mismatches   33;  Indels   20;  Gaps    3;

Qy      22 SNNKTLVSLKKKKPFHLYCVIYIPLVPKLIILFLDIAFIPKSLISQFQNNHYTHNH---T 78
           |||     :||||     | |     | :    ||  :   |  :: :| :| : |   :
Db    1069 SNNYKFFIIKKKKKKLKKLCYIMKSFHPHI----LDEFWFNLSCQNEIKNIYYKNLHFVIS 1124

Qy      79 NHNTNNIRFNIIS------------NCRT 95
            ||:: | | ||:              || |
Db    1125 LHNSSIIDFKIINHFILNKIFENISINCTT 1154


RESULT 10
AAW98706
ID   AAW98706 standard; Protein; 346 AA.
XX
AC   AAW98706;
XX
DT   31-MAR-1999  (first entry)
XX
DE   H. pylori GHPO 727 protein.
XX
KW   GHPO protein; Helicobacter infection; gastroduodenal disease; gastritis;
KW   peptic ulcer disease.
XX
OS   Helicobacter pylori.
XX
PN   WO9843478-A1.
XX
PD   08-OCT-1998.
XX
PF   01-APR-1998;   98WO-US06371.
XX
PR   29-JUL-1997;   97US-0902615.
PR   01-APR-1997;   97US-0833457.
PR   24-JUN-1997;   97US-0881227.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (INMR ) MERIEUX ORAVAX PASTEUR MERIEUX SERUMS.
XX
PI   Al-Garawi A,  Kleanthous H,  Miller C,  Oomen RP,  Tomb J;
XX
DR   WPI; 1998-542293/46.
DR   N-PSDB; AAX14425.
XX
PT   New isolated Helicobacter polynucleotides - used to develop products
PT   for the diagnosis, prevention and treatment of Helicobacter
PT   infections and gastrointestinal diseases
XX
PS   Claim 8; Page 1482-1484; 2054pp; English.
XX
CC   This sequence represents a Helicobacter pylori GHPO protein of the
CC   invention. The polypeptides can be used for preventing or treating
CC   Helicobacter infections, and gastroduodenal diseases associated with
CC   these infections, including acute, chronic, and atrophic gastritis, and
CC   peptic ulcer diseases, e.g. gastric and duodenal ulcers. They can also be
CC   used for the production of antibodies. The products can also be used for
CC   detection and diagnosis.
XX
SQ   Sequence   346 AA;

  Query Match             13.0%;  Score 68;  DB 19;  Length 346;
  Best Local Similarity   26.3%;  Pred. No. 4.7;
  Matches   26;  Conservative   12;  Mismatches   45;  Indels   16;  Gaps    3;

Qy      11 HFKV------TFWETDLSNNKTLVSLKKKKPFHLYCVIYIPLVPKLIIL-----FLDIAF 59
           |||:      |:     : || : ||| :    | |:   | :    :|       |||
Db     146 HFKIKSVIVSTYQAVSGAGNKGIESLKNELKTALECLEKDPTIDLNQVLQAGAFAYPIAF 205

Qy      60 IPKSLISQFQNNHYTHN-----HTNHNTNNIRFNIISNC 93
             : | |: | ||        |  |    : | | : |
Db     206 NAIAHIDTFKENGYTKEELKMLHETHKIMGVDFPISATC 244


RESULT 11
ABB49049
ID   ABB49049 standard; Protein; 907 AA.
XX
AC   ABB49049;
XX
DT   05-FEB-2002  (first entry)
XX
DE   Listeria monocytogenes protein #1753.
XX
KW   Antibacterial; gene therapy; vaccine; biosynthesis; biodegradation;
KW   vitamin B12; bacterial infection; disease.
XX
OS   Listeria monocytogenes.
XX
PN   WO200177335-A2.
XX
PD   18-OCT-2001.
XX
PF   11-APR-2001; 2001WO-FR01118.
XX
PR   11-APR-2000; 2000FR-0004629.
XX
PA   (INSP ) INST PASTEUR.
XX
PI   Buchrieser C,  Frangeul L,  Couve E,  Rusniok C,  Fsihi H,  Dehoux P;
PI   Dussurget O,  Chetouani F,  Nedjari H,  Glaser P,  Kunst F,  Cossart P;
PI   Daniels J,  Goebel W,  Kreft J,  Kuhn M,  Ng E,  Vazquez-Boland JA;
PI   Dominguez-Bernal G,  Garrido-Garcia P,  Tierrez-Martinez A,  Amend A;
PI   Chakraborty T,  Domann E,  Hain T,  Berche P,  Charbit A,  Durant L;
PI   Perez-Diaz J,  Baquero F,  Garcia Del Portillo F,  Gomez-Lopez N;
PI   Maduenio E,  De Pablos B,  Wehland J,  Kaerst U,  Entian K,  Hauf J;
PI   Rose M,  Voss H;
XX
DR   WPI; 2002-010914/01.
XX
PT   Genomic sequence for Listeria monocytogenes, useful e.g. for treatment
PT   and prevention of Listeria and related bacterial infections, and
PT   related polypeptides  -
XX
PS   Claim 6; SEQ ID No 1754; 192pp; French.
XX
CC   The present invention relates to the genome sequence of Listeria
CC   monocytogenes EGD-e (see ABA03041). The genome sequence and fragments of
CC   it are useful for selecting probes and primers for detecting genes in L.
CC   monocytogenes and related organisms, and for studying genetic
CC   polymorphisms and other genomes. The present sequence is a protein
CC   encoded by the genome sequence of the present invention. Proteins
CC   expressed from the genome sequence are useful for raising specific
CC   antibodies, identification of L. monocytogenes and related organisms, and
CC   for biosynthesis and biodegradation, especially biosynthesis of Vitamin
CC   B12. The genome sequence and proteins encoded by it are also useful for
CC   selecting compounds that regulate gene expression and cell replication
CC   and modulate L. monocytogenes-related diseases. In addition, the genome
CC   sequence and proteins encoded by it are useful in pharmaceutical and
CC   vaccines compositions for the treatment or prevention of infections by L.
CC   monocytogenes and related organisms.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
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